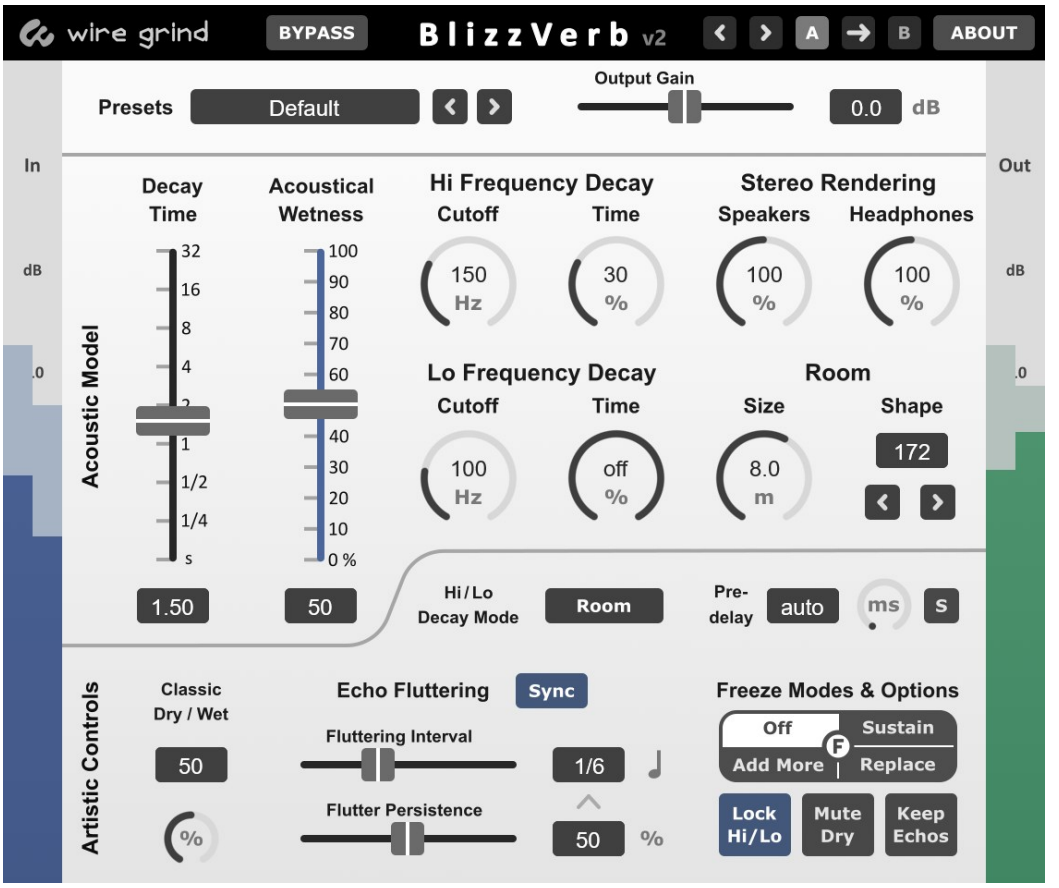
Wire Grind
BlizzVerb v2
User Manual



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Overview

BlizzVerb is a VST3 effects plugin for Windows systems. It uses a physics and psycho-acoustics based core model to produce realistic sounding algorithmic reverberation.

It uses psycho-acoustically based parameters to control a physics-based algorithmic model. The end result is realistic sounding reverberation without the unnecessary and overly technical control parameters.

Demo Version Limitations

There are two differences between the demo versions the full versions:

- The demo version is unable to save settings.
- The demo version periodically ads a tone or chirp sound to the output.

Installation

This program comes with a set up application that will guide you through the process. You will likely need to unzip or extract the download package before running. Close other applications beforehand to avoid installation difficulties. The main apps known to cause install problems are audio apps (e.g. DAW software).

Uninstall

The program can be removed using Windows' add/remove utility.

System Requirements

Operating System

Windows versions 7 through 11.

Supported Host Programs

A program supporting 64-bit VST3 effects plugins is required.

Internet Access

Access to the world wide web is required during installation.

Specifications

Supported Sample Rates

44.1kHz, 48kHz, 88.2kHz, 96kHz, 176.4kHz, 192.0kHz

Other sample rates may work too, but we have not tested them. If in doubt, please try the free demo version.

Plugin Format

VST3, 64-bit

Software Interface Details

Some notes about the GUI

- Hover over any parameter to see a pop-up explanation for that parameter.
- For many parameters, a value can be typed in. To do this, double click on the number.
- Parameters are listed mostly in alphabetical order. Some, however, are listed under a group of parameters (e.g. Echo Fluttering, Freeze Mode, Freeze Options, and Predelay).

A / B, Arrow

BlizzVerb will remember and save two sets of parameters. The “A” and “B” buttons will both toggle between the two parameter sets. The arrow between “A” and “B” will copy the active A/B parameters to the non-active parameters. It will then automatically toggle to the other parameter set.

Acoustical Wetness

Adjusts the wetness of the underlying acoustic model. It works similarly to a traditional dry/wet fader, however, it provides a much more realistic sound. It can be used together with the “Vintage Dry/Wet” control for different effects.

Bypass

When enabled, the effect’s DSP is bypassed, and the output audio is unaltered.

Cut-Off

The two “Cut-Off” frequency knobs divide the spectrum into three segments, lo, mid, and hi. The mid decay time (the primary decay time) is controlled by the “Decay Time” slider. For the lo and hi segments, decay time is adjusted as percentage of the global time using the two “Decay Rate” knobs.

Decay Rate

The audio spectrum is divided into three segments, lo, mid, and hi. The global decay time is controlled by the “Decay Time” slider. For the lo and hi segments, decay time is further adjusted using the two “Decay Rate” knobs. Setting the knob to 100% disables spectral shaping, and that portion of the algorithm is bypassed.

Decay Time

Sets the amount of time needed for the reverberation to fade away. Additional frequency-dependent decay time adjustments can be made for lower and higher frequencies using the “Cut-Off” and “Decay-Rate” knobs.

Echo Fluttering

This parameter makes the reverb fluctuate and sound more like a delay effect.

Fluttering Interval

Sets the time interval of the fluctuations. When “Echo Fluttering” is synced, the fluttering interval is displayed as a fraction of a whole note.

Flutter Persistence

Sets the degree to which the echoing is sustained over time.

Sync

This syncs the “Fluttering Interval” to your DAW’s tempo settings.

Freeze Modes

When a reverb is frozen, the current sound will persist long after the input sound has stopped. BlizzVerb has four buttons (along with the “L” knob) that set the freeze mode. There are also three mode option buttons.

Once a freeze has begun, there are a number of ways to alter it. For example, switching between freeze modes, or toggling the option buttons.

The freeze mode is saved in user presets, DAW projects, and undos/redos. This is useful for the mode called “Replace,” which will start up again when the settings are loaded. For the modes “Sustain” and “Add More,” it does not have obvious uses.

Off

Disables freezing

Sustain

This freezes the reverb instantly wherever it is. The reverb can be frozen when it is in any other freeze modes (Off, Add More, or Replace).

Add More

This adds continually adds incoming audio to the frozen reverb.

Replace

This setting freezes incoming audio which it uses to replace, or overwrite, already frozen reverb. This mode is almost like using a different reverb algorithm altogether, and the setting can be saved with your project or as a preset.

F

This is a knob that does more or less the same thing as the four surrounding toggle buttons. Users of certain DAWs (e.g. FL Studio, Cubase) can use this to link the freeze mode to an automation track or to a MIDI control.

Freeze Options

BlizzVerb has three options that modify the freeze modes.

Lock Hi/Lo

When enabled, the freeze mode will be applied to not just the mid frequencies, but the hi and lo ones as well. When disabled, the settings for “Hi Frequencies” and “Lo Frequencies” will be applied, and this typically causes some amount of decay.

Mute Dry

This causes the dry signal to be muted when “Sustain” mode is activated.

Keep Echos

When “Echo Fluttering” is used along with freezing, the sound texture will normally dissipate over time. When “Keep Echos” is enabled, the texture is sustained.

Headphones

Sets the depth of the headphone-based stereo model. It uses an acoustics model between 0%-100%, and it can be set up to 200% for even more width. See also the parameter “Speakers.”

0%	No stereo enhancement.
100%	Full headphone-based stereo acoustics model.
Above 100%	The echos are pushed further to the sides, beyond what is allowed by physics.

Hi/Lo Decay Profile

Frequency-dependent decay is controlled by the four knobs under the “Hi Frequency Decay” and “Lo Frequency Decay” headings. The shaping algorithm can also modified by selecting one of the two “Hi/Lo Decay Profile” modes below.

Room

This mode is designed to emulate the spectral decay of a real room.

Tone

This mode adds coloration to the reverb.

Output Gain

The amount of gain applied to the output signal.

Predelay

This adds a delay between the dry signal and the effect signal. When set to zero, the predelay switches to “auto” mode, and the predelay time is set automatically by the acoustic model.

S (sync)

The predelay can be synced with the host’s tempo settings by clicking on the “S” button. When synced, the predelay time is displayed as a fraction of a whole note.

Presets

This is a pop-up menu for loading factory presets. The two arrows beside it are for loading the previous and next preset.

Shape

Selects different echo patterns for the reverb. Different rooms will differ in coloration, texture of early reflections, and stereo positioning. The effect is much more audible under certain circumstances. For example, the texture of early reflections more readily apparent for large rooms when an impulsive sound (e.g. drums) is used. Also, more coloration tends to occur with smaller rooms. Note: The sound of the reverberation will be constrained by other parameters (e.g. decay time, wetness, hi/lo frequency decay, etc) regardless of the room shape. Therefore, the results of changing the room shape are often difficult to discern.

Size

Sets the size of the space being modeled. The value is the size of the simulated room along one dimension, and the room's volume is the cube of this number.

Speakers

Sets the depth of the speaker-based stereo model. It uses an acoustics model between 0%-100%, and it can be set up to 200% for additional width. See also the parameter “Headphones.”

0%	No stereo enhancement.
100%	Full speaker-based stereo acoustics model.
Above 100%	The echos are pushed further to the sides, beyond what is allowed by physics.

Undo / Redo, <, >

The two angle brackets at the top are undo and redo buttons. Undo and redo will be applied only to the active A/B parameters.

Classic Dry/Wet

This is a classic dry/wet adjustment. It’s useful for creative and classic reverb sounds. Adjust to taste. For more realistic dry/wet adjustment we recommend setting this to 50% and using the “Acoustical Wetness” parameter instead. Both “Vintage Dry/Wet” and “Acoustical Wetness” may be used together to vary the sound a bit.